Warren Wood

Computing Skills and knowledge

Expected by the End of Year __5_____

Generic Skills

- be able to choose an appropriate program to perform a task
- be able to combine and refine information from various sources.
- interpret and question the plausibility of information.
- have experience of a range of ICT equipment and software
- describe and discuss their work and explain how and why they have used ICT
- use appropriate ICT vocabulary

Computer Science

Control and Programming

- use on-screen control software to plan, create and run a set of instructions to make e.g. to change the traffic lights
- predict the outcome of a control procedure
- be aware of control applications in everyday life e.g. automatic doors, robots in car factories, automatic security lights
- create patterns using repeated simple procedures
- test, modify and improve Logo patterns
- explore the effect of changing a variable within a procedure
- use a variable to increase programming possibilities
- change an input to a program to achieve a different output
- use logical reasoning to detect and debug mistakes in a program
- use logical thinking, imagination and creativity

Data Logging

- be aware of other sensors that can be used e.g. light sensor, sound sensor, pulse monitor
- be able to interpret the data from the sensing device
- use sensing devices e.g. in their science experiments

Digital Literacy

Research

- with support, use a more complex search engine to find information on the Internet
- use AND and OR in their searches
- with support, check the accuracy of information
- begin to be aware of privacy and other issues related to using the Internet

Data handling

- carry out more complex searches on more complex prepared databases e.g. be able to answer complex questions such as – Did all the mini beasts in a particular habitat have the same diet?
- use AND and OR in their searches
- identify data handling opportunities, set up a data file and enter data
- check for validity and amend errors
- use the data file to answer complex questions

Spreadsheets

- use a spreadsheet to record data and produce graphs
- enter data in a prepared spreadsheet
- select data to produce a graph
- use a spreadsheet to explore number patterns e.g. in a hundred square, multiplication table

E-Safety

- communicate kindly and respectfully and can describe the impact where this does not happen
- explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to a trusted adult
- use a secure password and safe screen name when I am using an online tool
- explain the risks of sharing too much about myself online
- explain why I need to protect my computer or device from harm
- identify the intended audience for an advert

Information Technology

Graphics and digital video

- use a wider range of tools within an art package as necessary
- continue to manipulate images using an art package or other software
- begin to evaluate when it is appropriate to use an art package and when another medium would be more suitable
- continue to use a digital camera or digital video camera to take appropriate pictures or video for a specific purpose

Sound

- continue to use microphones/sound buttons as appropriate
- continue to use the sound files in other applications
- use more sophisticate music software to plan, create, evaluate, edit and play their own compositions

Multimedia

- design and create a presentation or digital film e.g. to show other pupils what they did on a school trip
- evaluate the suitability of the presentation for the given audience
- make changes to the presentation to make it more suitable for the audience

Word processing and Email

- use and practise their word processing skills in a range of contexts
- use email as a communication tool to collaborate with other pupils e.g. to work together on a project
- send a picture or document as an attachment
- know that files can be send via email as attachments
- know that email can be sent, forward or copied to more than one person
- begin to be aware that computer viruses can be sent via email